

lar quad slightly longer than wide and wider behind. Sternum nearly oval, slightly pointed posteriorly, brown, clothed with fine hairs. Labium and maxillae brown, longer than wide, distal end of maxillae pale and wide. Chelicerae weak, reddish-brown, clothed with hairs. Legs short and stout, reddish brown clothed with hairs and spine-like hairs.

Abdomen: Nearly elliptical, longer than wide, clothed with fine hairs and some spine-like hairs. Dorsal side decorated with pattern of dots as in text-fig. 4. Anterior median provided with a small sigilla, followed posteriorly by two pairs of sigilla, posterior pair larger than the other and all sigilla provided with deep red colour. Ventral side pale in colour.

Epigyne as in text-fig. 5. Internal genitalia as in text-fig. 6. Male unknown.

Holotype female in spirit.

Type-locality: Chogaon (Tapri) Dist., Kinour, Himachal Pradesh, India. Coll. Dr. Arun Kumar, 21.6.1975.

This species resembles *Tharpyna indica* but can be separated as follows: (i) Abdomen brown with pale dots all over the dorsum but in *T. indica* abdomen jet black and provided near the edges with conspicuous irregular shaped chalk-white patches. (ii) Lateral eyes large and equal but in *T. indica* anterior lateral eyes larger than the others. (iii) Epigyne and Internal genitalia structurally different.

REFERENCES

DYAL, S. (1935): Spiders of Lahore, *Bull. Zool. Punjab Univ.*, 1; 119.

POCOCK, R. I. (1900): Fauna of Brit. India, Arachnida.

SIMON, E. (1892): *Hist. Nat. Araign.*, 1, 1015.

STOLICZKA, F. (1869): Contribution towards the knowledge of Indian Arachnidae. *J. Asia. Soc. Bengal*, 38, 201.

TIKADER, B. K. (1960): On some new species of

spiders (Arachnida) of the family Thomisidae from India. *J. Bombay nat. Hist. Soc.*, 57(1): 173.

————— (1971): Revision of Indian Crabspiders (Araneae: Thomisidae). *Mem. Zool. Surv. India*, Calcutta, 15 (3): 1-90.

————— & BISWAS, BIJAN (1974): Some spiders of the genus *Xysticus* (Family: Thomisidae) from Darjeeling, India. *Proc. Indian Acad. Sci.*, 80 (6): 262-266.

A NEW SPECIES OF *PELIOCOCCUS* BORCHSENIUS FROM INDIA (HOMOPTERA : PSEUDOCOCCIDAE)¹

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AND

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(With fifteen text-figures)

Genus *Peliococcus* Borchsenius

The genus *Peliococcus* was proposed by Borchsenius in 1948 with *Phenacoccus chersonensis* Kiritshenko as type species. The

genus is reported for the first time from India.

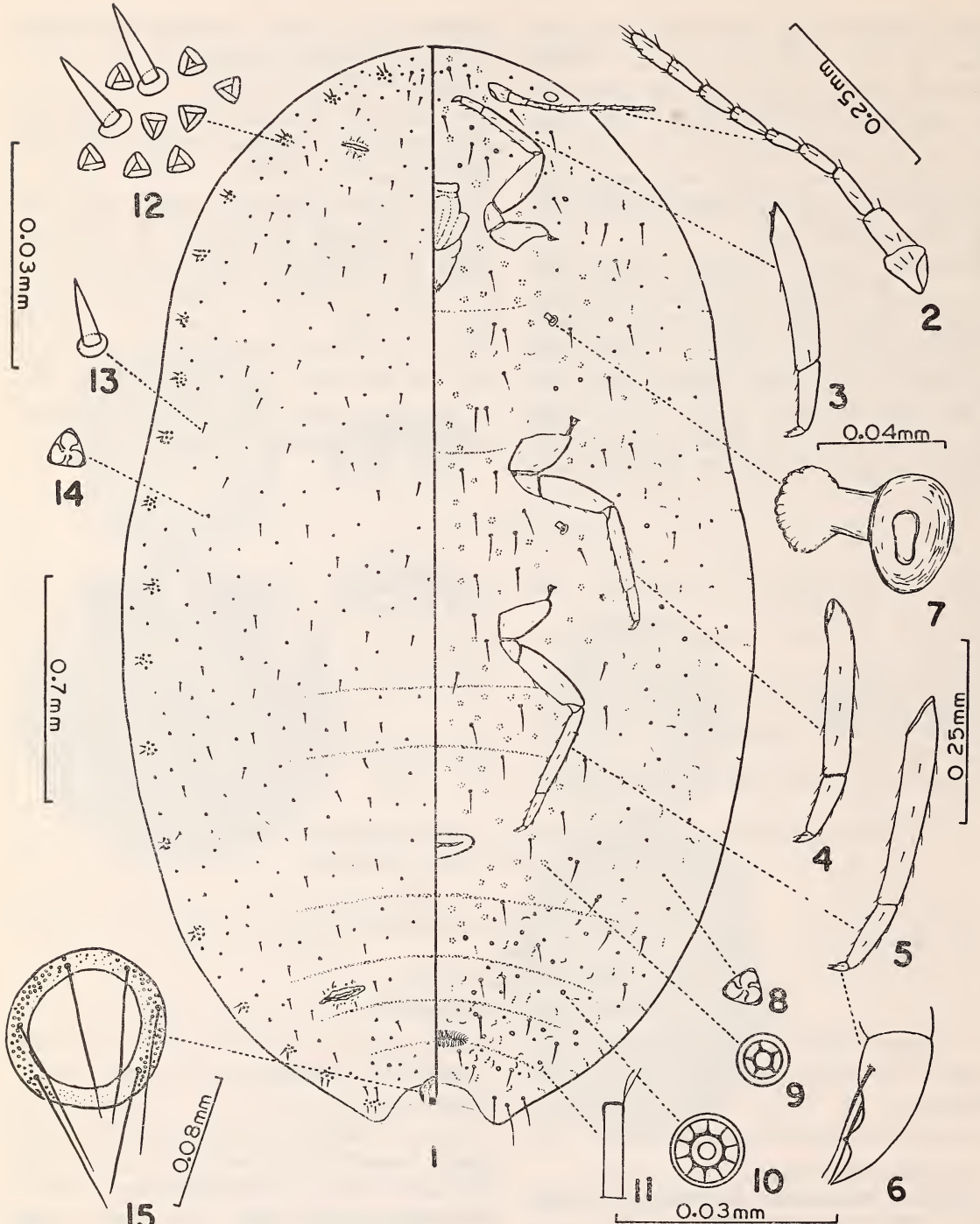
***Peliococcus indicus* sp. nov.** (figs. 1-15)

Female (fig. 1):

Mounted material broadly oval in outline, slightly more than one and a half times longer than wide (3.32 : 1.93 mm). Dorsal surface membranous with minute setae (fig. 13) and

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Figs. 1-15. *Peliococcus indicus* sp. nov., ♀ :

(1) body, dorsal and ventral view; (2) antenna; (3-5) part of fore, mid and hind legs; (6) claw of hind leg; (7) anterior spiracle; (8) trilocular pore, (ventral); (9) quinquelocular pore; (10) multilocular pore; (11) tubular duct; (12) marginal cerarii; (13) dorsal setae; (14) trilocular pore, (dorsal); (15) anal opening.

NEW DESCRIPTIONS

trilocular pores (fig. 14); margin of the body with a series of 18 pairs of cerarii, each with a pair of conical spines and a group of 7-10 trilocular pores (fig. 12); anal lobe cerarii formed with two conical spines surrounded by one or two minute setae and a group of trilocular pores; dorsal cephalic and abdominal

the margin of the body having a series of 18 pairs of cerarii, each cerarii with two conical spines and a group of trilocular pores, 9-segmented antennae, presence of cephalic and abdominal ostioles, and dentate claw. But the two species distinctly differ in the following important characters:

Peliococcus plurimus De Lotto

Peliococcus indicus sp. nov.

1. Claw digitule dilated at apex.
2. Circulus absent.
3. Multilocular pores confined to posterior part of abdomen on ventral surface.
4. Compact clusters of numerous multilocular pores present.

- Claw digitule pointed at apex.
 Circulus present
 Multilocular pores distributed throughout the body on ventral surface.
 Compact clusters of multilocular pores absent.
-

ostioles well developed with inner membranous lips; anal ring cellular with six long setae (fig. 15).

Ventral surface membranous with sparsely distributed multilocular pores (fig. 10), small and large setae; trilocular pores arranged along the marginal and sub marginal areas of the body (fig. 8); quinquelocular pores on the mid region of the body (fig. 9); tubular ducts sparsely distributed on marginal and on posterior abdominal segments (fig. 11); posterior margin with three pairs of long setae; circulus well developed, oval in shape, between 4th & 5th abdominal segments. Labium dimereous; anterior and posterior spiracles well developed (fig. 7). Antennae 9-segmented, 0.53 mm long, inserted near the anterior margin of the cephalic region; 1st segment wider than long, segments 2-9 longer than wide (fig. 2). Legs normal; femur and tibia of fore, mid and hind legs are 0.21:0.21 mm, 0.22:0.25 mm and 0.25:0.29 mm in length respectively; claw simple with a denticle placed rather apically; claw digitules long and narrow (fig. 6).

Peliococcus indicus is more closely related to *Peliococcus plurimus* De Lotto in

Holotype ♀, INDIA: Mysore, Bangalore, Hebbal, on *Prosopis spicigera* L., 29.vi.1968, Coll. S. Adam Shafee.

Paratypes 4 ♀ (same data as for holotype).

Holotype and Paratypes in Zoological Museum, Aligarh Muslim University, Aligarh, India.

Hayat *et al.* (1972), Shafee (1972) and Shafee *et al.* (1973) reported some species of encyrtids as parasites of *Peliococcus* sp. Host material of these parasites deposited in the Zoological Museum, Aligarh Muslim University, Aligarh has been studied and described here as a new species. The parasites reported by earlier workers are *Anagyrus nigricorpus* Shafee *et al.*, *Cheiloneurus latifrons* Hayat *et al.*, *Mashhoodia flava* Shafee, *M. indica* Shafee, and *Plagiomerus bangalorensis* Shafee *et al.*

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REFERENCES

- BORCHSENIUS, N. S. (1948): Contribution to the revision of the genus *Phenacoccus* Ckll. (Insecta, Homoptera, Coccoidea) (In Russian). *C. R. Acad. Sci. USSR, Moscow (N.S.)*. 61: 953-956.
- DE LOTTO, G. (1969): The Mealy bugs of South Africa (Homoptera: Pseudococcidae). II, *Entomology Mem. Dep. Agric. Serv. Repub. S. Africa* No. 20: 1-30.
- HAYAT, M., ALAM, S. M. & AGARWAL, M. M. (1975): Taxonomic survey of Encyrtid Parasites (Hymenoptera: Encyrtidae) in India. *Alig. Musl. Univ. Publ. (Zool. Ser.) Ind. Ins. Typ.* 9: 1-112.
- SHAFEE, S. A. (1972): Species of the genera *Tachardiaephagus* Ashmead, 1904 and *Mashhoodia* Shafee, 1972 (Hymenoptera: Encyrtidae) from India. *Indian J. Ent.* 34: 325-329.
- ALAM, S. M. AND AGARWAL, M. M. (1975): Taxonomic survey of Encyrtid Parasites (Hymenoptera: Encyrtidae) in India. *Alig. Musl. Univ. Publ. (Zool. Ser.) Ind. Ins. Typ.* 10: 1-125.

A NEW SPECIES AND A NEW RECORD OF THE INTERESTING
GENUS *SMICROMORPHA* GIRAULT (HYMENOPTERA :
CHALCIDIDAE) FROM ORIENTAL REGION¹

T. C. NARENDRAN²

(With six text-figures)

The genus *Smicromorpha* was erected by Girault (1913) who included it under a new tribe Smicromorphini of the family Chalcididae. Girault described this genus based on the type *Smicromorpha doddi* Girault from Australia. He described two more species, *S. cadaverosa* (1914) and *S. minera* (1926) from Australia. According to Dr. Boucek *S. minera* is a misspelling for *S. minerva* (Personal communication). Since then there was no report on this genus from any part of the world. The present paper records this genus from India for the first time.

Smicromorpha keralensis sp. nov.

(Figs. 1-6)

Male: Length 4.5 mm. Head golden yellow with the eyes and ocelli black. Thorax golden

yellow with pale brown patches as in Figure 4. Wings hyaline. Fore- and mid-legs golden yellow with the pretarsus pale brown. Hind coxa brownish-black; hind femur dull golden yellow with black coloration on the proximal and dorsal margin as in figure 6. Hind tarsi golden yellow with the pretarsus brown. Abdomen blackish-brown. Pubescence golden yellow.

Head (Fig. 1) a little wider than the maximum width of thorax, sparsely and shallowly punctate; interspaces between the punctures rugulose. Scrobe deep with transverse striations; apex of scrobe far away from the front ocellus, area below scrobe coarse with transverse striations. Pre- and post-orbital carinae absent (Figs. 1 & 2). Eyes large and devoid of cilia. Inter-antennal projection very small and hardly visible. The maximum diameter of median ocellus equal to that of lateral; the distance between median and lateral ocelli one-third the interocellar distance; interocular

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